PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES A SIGNAL MODIFICATION AT THE INTERSECTION OF MD 170 AT MD 174 IN ANNE ARUNDEL COUNTY. MD 170 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

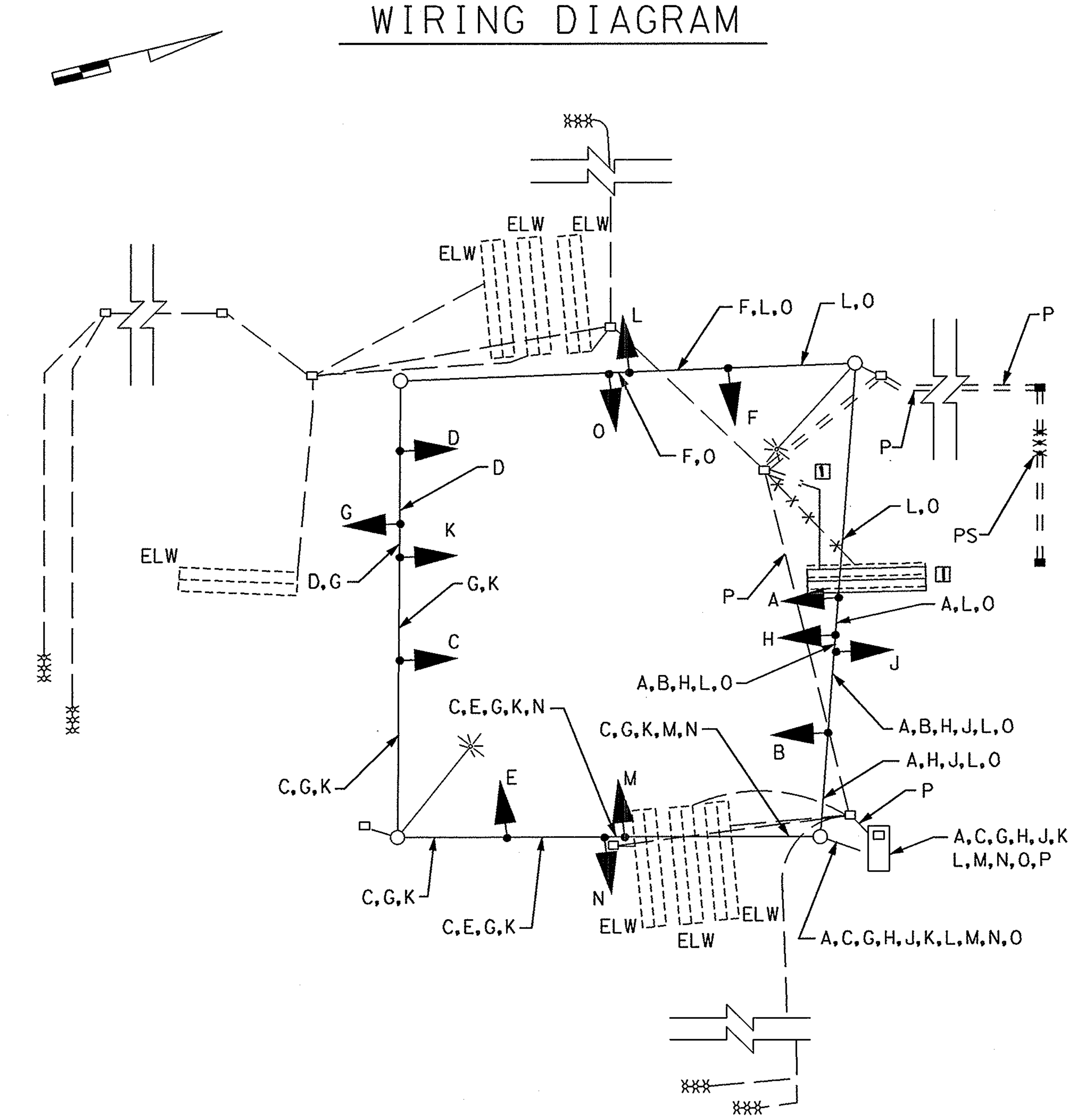
INTERSECTION OPERATION

NORMAL OPERATION
THE INTERSECTION WILL OPERATE IN A NEMA-EIGHT-PHASE FULLY ACTUATED MODE. THE MOVEMENTS ON MD 170 WILL OPERATE CONCURRENTLY WITH AN EXCLUSIVE LEFT TURN MOVEMENT. THE MOVEMENTS ON MD 174 WILL OPERATE CONCURRENTLY WITH AN EXCLUSIVE/PERMISSIVE LEFT TURN MOVEMENT.

SPECIAL NOTE

ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY.

WIRING DIAGRAM



A,B,C
D,E,F
G,H,J
K,L,M
N,O
} ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)

P NON INVASIVE PROBE LEAD IN

PS NON INVASIVE PROBE SET

ELW EXISTING LOOP WIRE

t:\MD170-MD174\g230xgg01.rdl
8/16/05 mb
t:\plotsta\pentables\rf-redline.tbl

EQUIPMENT LIST A

A. EQUIPMENT TO BE FURNISHED BY THE SHA

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
973023	813	30 S.F.	SHEET ALUMINUM SIGN TO CONSIST OF: -2 EA. R10-5 (LEFT TURN ON GREEN ARROW ONLY) 24 IN. X 18 IN. - SPAN MOUNT -2 RA. R10-12 (LEFT TURN YEILD ON GREEN) 30 IN. X 36 IN. - SPAN MOUNT -1 EA. W9-24L (LANE ENDS MERGER LEFT) 30 IN. X 42 IN. - SPAN MOUNT

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

EDWARD RODENHIZER
CHIEF, SHA TRAFFIC SIGNALS SHOP
PHONE: 410-787-7650

RICHARD DAFF, SR
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: 410-787-7630

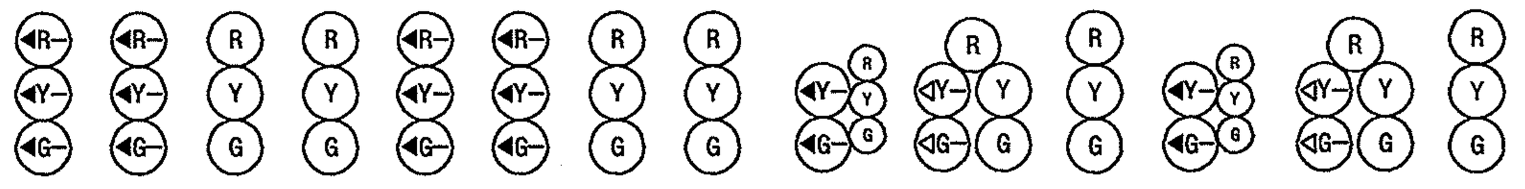
MARK COBLENTZ
ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
PHONE: 410-841-1004

CHARLES GEORGE
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: 410-841-1002

KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: 410-841-1003

JOHN MAYS
UTILITIES ENGINEER
PHONE: 410-841-1005

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
PHASE 1+5	◄G–	◄G–	R	R	◄G–	◄G–	R	R	R	R	R	R	R	R	
1+5 CHANGE	◄Y–	◄Y–	R	R	◄Y–	◄Y–	R	R	R	R	R	R	R	R	
PHASE 1+6	◄G–	◄G–	G	G	◄R–	◄R–	R	R	R	R	R	R	R	R	
1+6 CHANGE	◄Y–	◄Y–	G	G	◄R–	◄R–	R	R	R	R	R	R	R	R	
PHASE 2+5	◄R–	◄R–	R	R	◄G–	◄G–	G	G	R	R	R	R	R	R	
2+5 CHANGE	◄R–	◄R–	R	R	◄Y–	◄Y–	G	G	R	R	R	R	R	R	
PHASE 2+6	◄R–	◄R–	G	G	◄R–	◄R–	G	G	R	R	R	R	R	R	
2+6 CHANGE	◄R–	◄R–	Y	Y	◄R–	◄R–	Y	Y	R	R	R	R	R	R	
PHASE 3+7	◄R–	◄R–	R	R	◄R–	◄R–	R	R	R ◄G–	R ◄G–	R	R ◄G–	R ◄G–	R	
3+7 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	R ◄Y–	R ◄Y–	R	R ◄Y–	R ◄Y–	R	
PHASE 3+8	◄R–	◄R–	R	R	◄R–	◄R–	R	R	G ◄G–	G ◄G–	G	R ◄R–	R ◄R–	R	
3+8 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	G ◄Y–	G ◄Y–	G	R ◄R–	R ◄R–	R	
PHASE 4+7	◄R–	◄R–	R	R	◄R–	◄R–	R	R	R ◄R–	R ◄R–	R	G ◄G–	G ◄G–	G	
4+7 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	R ◄R–	R ◄R–	R	G ◄G–	G ◄G–	G	
PHASE 4+8	◄R–	◄R–	R	R	◄R–	◄R–	R	R	G	G	G	G	G	G	
4+8 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	Y	Y	Y	Y	Y	Y	
FLASHING OPERATION	FL / ◄R	FL / ◄R	FL / Y	FL / Y	FL / ◄R	FL / ◄R	FL / Y	FL / Y	FL / R	FL / R	FL / R	FL / R	FL / R	FL / R	

EQUIPMENT LIST B

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
585624	556	30 L.F.	24 IN. HEAT APPLIED WHITE THERMOPLASTIC REFLECTIVE PAVEMENT MARKINGS
805115	805	70 L.F.	3 IN. SCHEDULE 80 RIGID PVC CONDUIT-BORED
805135	805	290 L.F.	3 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805150	805	110 L.F.	3 IN. SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
810605	810	1 EA.	NONINVASIVE DETECTOR, 1000 FT. LEAD IN CABLE
811001	811	5 EA.	ELECTRICAL HANDHOLE
813015	813	30 S.F.	INSTALL OVERHEAD SIGN
860270	814	6 EA.	8 IN. VEHICULAR BLACK FACED TRAFFIC SIGNAL HEAD SECTION
860272	814	42 EA.	12 IN. VEHICULAR BLACK FACED TRAFFIC SIGNAL HEAD SECTION
861107	810	2000 L.F.	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)
800000	XXX	LS.	REMOVE AND DISPOSE OF EXISTING SIGNAL MATERIAL
[1] 805160	805	20 L.F.	1 IN. LIQUID TIGHT FLEXIBLE NON METALLIC CONDUIT
[1] 862101	805	540 L.F.	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
[1] 862102	805	125 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)

EQUIPMENT LIST C

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION 7491 CONNELLEY DR. HANOVER. MD 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

NONE

[1] REDLINE REVISION NO. 1 8/22/2005

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET
MD 170 AT MD 174

DRAWN BY:	D. DODA	F.A.P. NO.		TS NO. 1464 - C2	SHEET NO.
CHECKED BY:	D. DODA	S.H.A. NO.			
SCALE:	NONE	COUNTY:	ANNE ARUNDEL	T.I.M.S. NO. E 567	9 OF 12
DATE:	DECEMBER 9, 1976	LOG MILE:	02 0170 03.75		